

Application No.: 09/982,997

Docket No.: 4468-031

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A color correction table generating method, comprising the steps of:

having a white point of a gamut of an image input signal substantially corresponding ~~corresponded~~ to a maximum brightness point having a same chromaticity as said white point and a maximum brightness in a gamut of an output device; and

generating a three dimensional color correction table, which correlates a color point in the gamut of the image input signal to a color point in the gamut of the image output device, in a specified color space wherein said white point of ~~[[a]]~~ the gamut of the image input signal substantially corresponds to said maximum brightness point;

wherein a color space in which an image processing is performed using the three dimensional color correction table is wider than a color space in which an image processing is performed using an one-dimensional color correction table.

2. (currently amended) An image processing device executing an image processing to an image input signal with referring to a three dimensional color correction table, which correlates a color point in ~~[[the]]~~ a gamut of the image input signal to a color point in ~~[[the]]~~ a gamut of ~~[[the]]~~ an image output device, in a specified color space wherein a white point of ~~[[a]]~~ the gamut of the image input signal substantially corresponds to a maximum brightness point having a same chromaticity as said white point and a maximum brightness in ~~[[a]]~~ the gamut of ~~[[an]]~~ the image output device;

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wherein a color space in which the image processing is performed using the three dimensional color correction table is wider than a color space in which an image processing is performed using an one-dimensional color correction table.

3. (original) The image processing device as claimed in claim 2, wherein the color space is a CIELAB color space, a CIELUV color space or a Yxy color space.

4. (original) The image processing device as claimed in claim 2, wherein the white point substantially corresponds to the maximum brightness point by scaling the gamut.

5. (original) The image processing device as claimed in claim 2, wherein a color point out of the gamut of the image output device and in the gamut of the image input signal is correlated to a color point in the gamut of the image output device.

6. (currently amended) An image processing method executing an image processing to an image input signal with referring to a three dimensional color correction table, which correlates a color point in ~~[[the]]~~ a gamut of the image input signal to a color point in ~~[[the]]~~ a gamut of ~~[[the]]~~ an image output device, in a specified color space wherein a white point of ~~[[a]]~~ the gamut of the image input signal substantially corresponds to a maximum brightness point having a same chromaticity as said white point and a maximum brightness in ~~[[a]]~~ the gamut of ~~[[an]]~~ the image output device;

wherein a color space in which the image processing is performed using the three dimensional color correction table is wider than a color space in which an image processing is performed using an one-dimensional color correction table.

7. (currently amended) A computer-readable medium storing a program of instructions for execution by the computer to perform an image processing to an image input signal

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with referring to a three dimensional color correction table, which correlates a color point in ~~[[the]]~~ a gamut of the image input signal to a color point in ~~[[the]]~~ a gamut of ~~[[the]]~~ an image output device, in a specified color space wherein a white point of ~~[[a]]~~ the gamut of the image input signal substantially corresponds to a maximum brightness point having a same chromaticity as said white point and a maximum brightness in ~~[[a]]~~ the gamut of ~~[[an]]~~ the image output device;

wherein a color space in which the image processing is performed using the three dimensional color correction table is wider than a color space in which an image processing is performed using an one-dimensional color correction table.

8. (currently amended) A computer-readable medium storing a three dimensional color correction table, which correlates a color point in ~~[[the]]~~ a gamut of ~~[[the]]~~ an image input signal to a color point in ~~[[the]]~~ a gamut of ~~[[the]]~~ an image output device, in a specified color space wherein a white point of ~~[[a]]~~ the gamut of the image input signal substantially corresponds to a maximum brightness point having a same chromaticity as said white point and a maximum brightness in ~~[[a]]~~ the gamut of ~~[[an]]~~ the image output device;

wherein a color space in which an image processing is performed using the three dimensional color correction table is wider than a color space in which an image processing is performed using an one-dimensional color correction table.

9. (previously presented) A projector comprising the image processing device as claimed in claim 2.

10. (new) The method of claim 1, wherein the white point of the gamut of the image input signal and said maximum brightness point of the gamut of the image output device initially have different brightness values;

said method further comprising scaling the gamut of the image output device to obtain a scaled gamut which has a scaled maximum brightness point corresponding to said maximum

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brightness point of the gamut of the image output device and having the same brightness value as the white point of the gamut of the image input signal.

11. (new) The method of claim 10, wherein, in said scaling, color values of a color point in the gamut of the image output device are all multiplied by the same constant to obtain color values of a corresponding color point in the scaled gamut.

12. (new) The method of claim 11, wherein said values are XYZ values in the CIEXYZ color system.

13. (new) The method of claim 1, further comprising scaling the gamut of the image output device to obtain a scaled gamut which has a scaled maximum brightness point corresponding to said maximum brightness point of the gamut of the image output device and having the same brightness value and chromaticity as the white point of the gamut of the image input signal;

wherein, in said scaling, color values of a color point in the gamut of the image output device are all multiplied by the same constant to obtain color values of a corresponding color point in the scaled gamut.

14. (new) The method of claim 13, wherein said values are XYZ values in the CIEXYZ color system.

15. (new) The device of claim 2, wherein said three dimensional color correction table correlates each color point of the gamut of the image input signal to one color point of a scaled gamut of the image output device;

said scaled gamut being located within the gamut of the image output device, and obtained by multiplying color values of each color point in the gamut of the image output device by the same

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constant to obtain color values of a corresponding color point in the scaled gamut.

16. (new) The device of claim 15, wherein said values are XYZ values in the CIEXYZ color system.